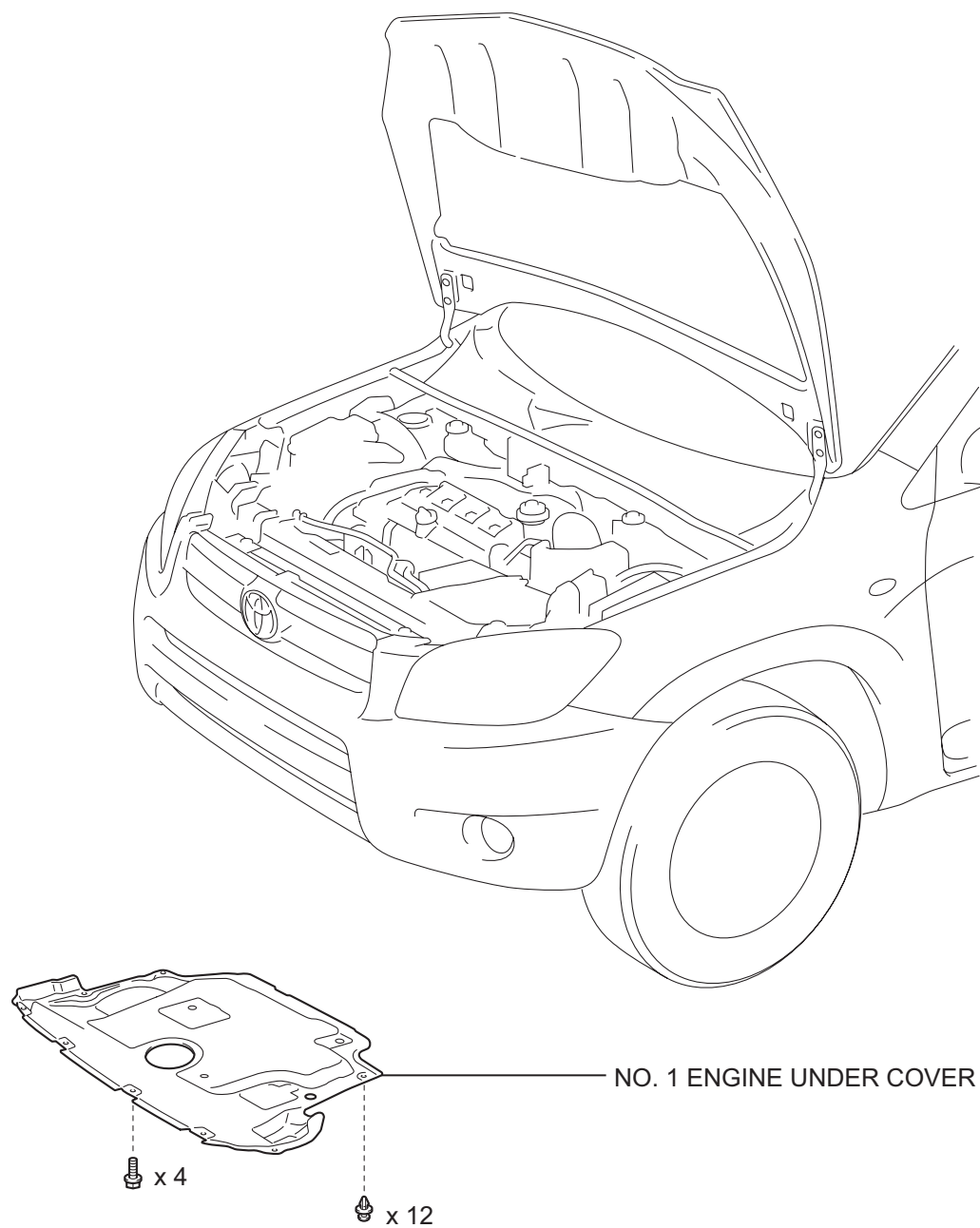
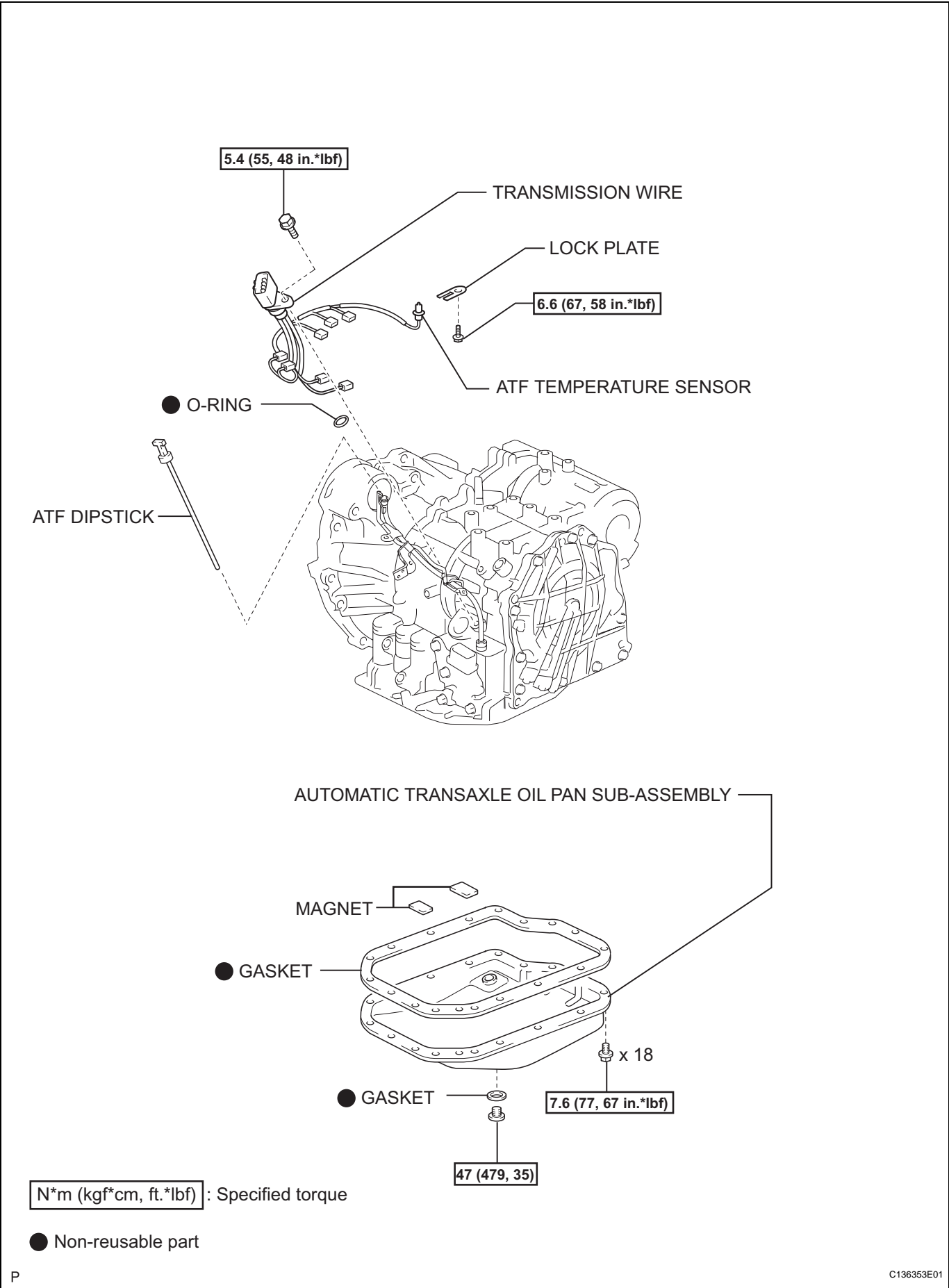


TRANSMISSION WIRE

COMPONENTS





REMOVAL

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. **REMOVE NO. 1 ENGINE UNDER COVER**

3. **DRAIN AUTOMATIC TRANSAXLE FLUID**

(a) Remove the drain plug and gasket, and drain the ATF.

(b) Install a new gasket and the drain plug.

Torque: 47 N*m (479 kgf*cm, 35 ft.*lbf)

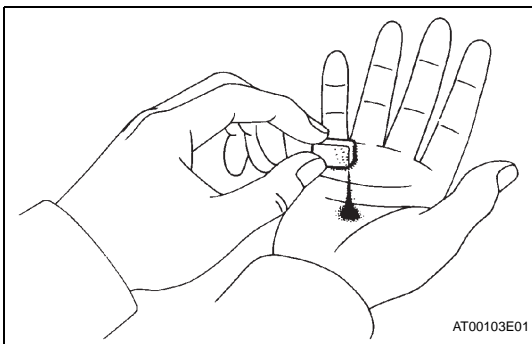
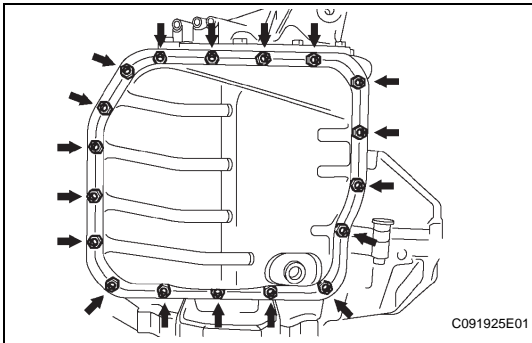
4. **REMOVE AUTOMATIC TRANSAXLE OIL PAN SUB-ASSEMBLY**

(a) Remove the 18 bolts, oil pan and gasket.

NOTICE:

Some fluid will remain in the oil pan. Carefully remove the oil pan.

(b) Remove the 2 magnets from the oil pan.



(c) Examine the particles in the pan.

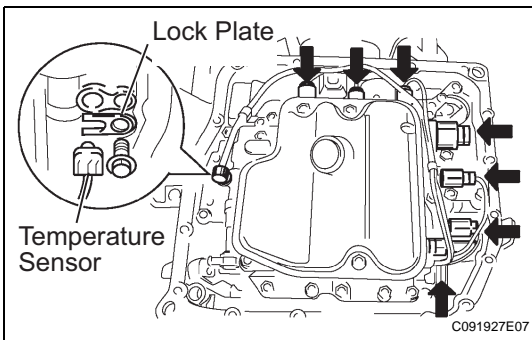
(1) Use the removed magnets to collect any steel chips. Look carefully at the chips and particles in the pan and on the magnet to anticipate what type of wear you will find in the transaxle.

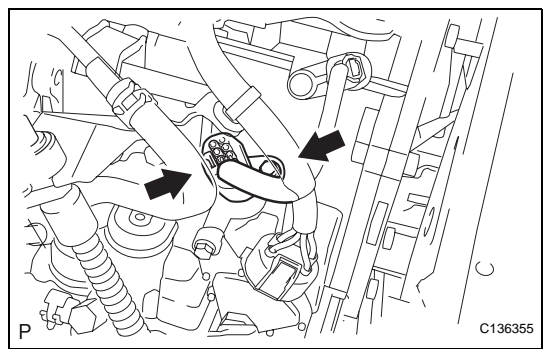
Steel (magnetic): bearing, gear and plate wear
Brass (non-magnetic): bush wear

5. **REMOVE TRANSMISSION WIRE**

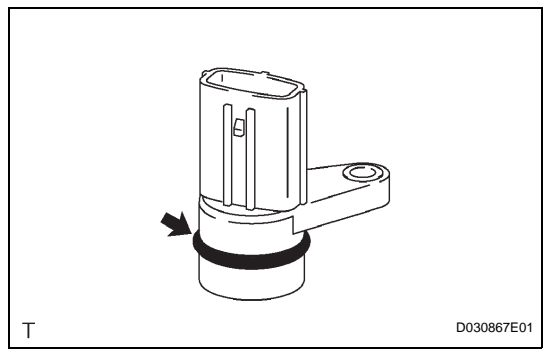
(a) Disconnect the 7 shift solenoid valve connectors.

(b) Remove the bolt, lock plate and ATF temperature sensor.

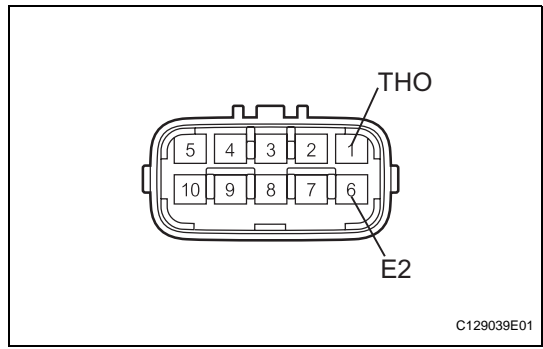




- (c) Disconnect the transmission wire connector.
- (d) Remove the bolt and transmission wire.



- (e) Remove the O-ring from the transmission wire connector.



INSPECTION

1. INSPECT TRANSMISSION WIRE

- (a) Measure the resistance of the transmission wire.

Standard resistance

Tester Connection	Specified Condition
1 (THO) - 6 (E2)	90 Ω to 156 kΩ
1 (THO) - Body ground	1 MΩ or higher
6 (E2) - Body ground	1 MΩ or higher

If the result is not as specified, replace the wire.

HINT:

If the resistance is not as specified for either of the ATF temperatures shown in the table below, the drivability of the vehicle may decrease.

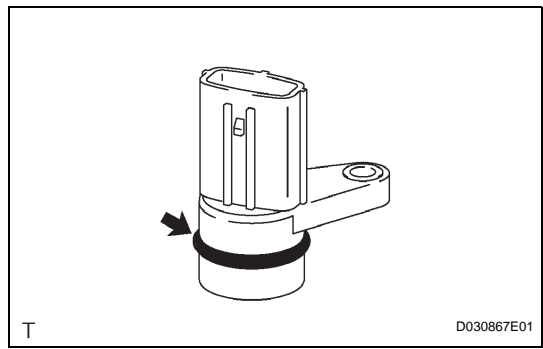
Standard resistance

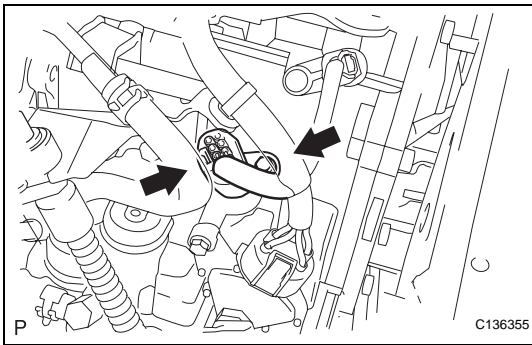
ATF Temperature	Specified Condition
10°C (68°F)	6.4 kΩ
110°C (230°F)	0.2 kΩ

INSTALLATION

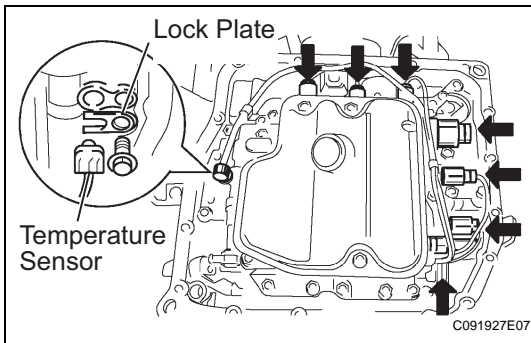
1. INSTALL TRANSMISSION WIRE

- (a) Coat a new O-ring of the transmission wire connector with ATF.
- (b) Install the O-ring to the transmission wire connector.

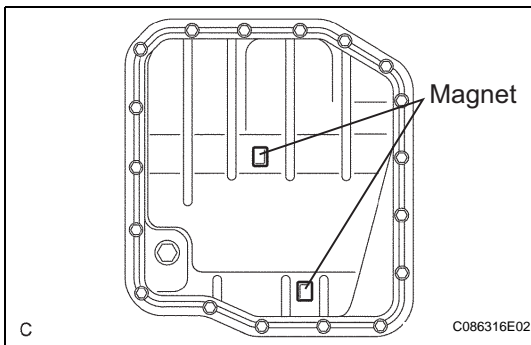




- (c) Install the transmission wire.
- (d) Install the bolt.
- (e) Connect the connector.

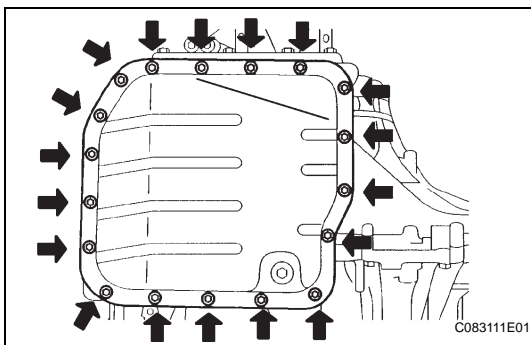


- (f) Coat the O-ring of the ATF temperature sensor with ATF.
- (g) Apply ATF to the bolt.
- (h) Install the ATF temperature sensor with the lock plate and bolt.
- Torque: 6.6 N*m (67 kgf*cm, 58 in.*lbf)**
- (i) Connect the 7 shift solenoid valve connectors.



2. INSTALL AUTOMATIC TRANSAXLE OIL PAN SUB-ASSEMBLY

- (a) Install the 2 magnets in the oil pan.



- (b) Install a new gasket and the oil pan with the 18 bolts.
- Torque: 7.6 N*m (80 kgf*cm, 69 in.*lbf)**

3. INSTALL NO. 1 ENGINE UNDER COVER

4. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

5. ADD AUTOMATIC TRANSAXLE FLUID

Fluid type:

Toyota Genuine ATF WS

6. INSPECT TRANSAXLE FLUID LEVEL

- (a) Inspect the fluid level (see page [AX-126](#)).

7. PERFORM RESET MEMORY

- (a) Perform the RESET MEMORY procedures (A/T initialization) (see page [AX-20](#)).